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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,776	02/20/2002	James M. Barton	TIVO0003C-D	4827

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GLENN PATENT GROUP
3475 EDISON WAY, SUITE L
MENLO PARK, CA 94025

EXAMINER

TRAN, THAI Q

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 04/04/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,776

Applicant(s)

BARTON ET AL.

Examiner

Thai Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed Jan. 23, 2003 have been fully considered but they are not persuasive.

In re pages 15-16, applicant argues, with respect to claims 1 and 29, that there is no teaching or suggestion that Kobayashi's invention will increase the quality of the video signal by processing the video and audio signals separately as the Office Action speculates, there is no teaching or suggestion in Logan that the quality of the video signal in Logan requires improvement, and there is no teaching or suggestion to combine the references as suggested by the Office Action.

In response, the examiner respectfully disagrees. The examiner has pointed out what each of the prior art references teaches and has indicated how and why these references would have been combined to arrive at the claimed invention. Applicant cannot show non-obviousness by attacking references individually where, as here the rejections are based on combination of references. In re Keller, 208 USPQ 871 (CCPA 1981).

Kobayashi et al discloses in col. 3, lines 36-65 that "The video signal processing circuit 24 and the audio signal processing circuit 25 process digital video signals S25 to S26 and digital audio signal S27 to S28 by switching, mixing and applying special effects respectively. Moreover, the video signal processing circuit 24 and the audio signal processing circuit 25 input digital video signals of the first system S29 to the Mth system S30 and the digital audio signals of the first system S31 to the Mth system S32

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which are obtained as a result of separate processing, to a video audio multiplexer 26".

It is clear that the video signal processing circuit 24 and the audio signal processing circuit 25 of Kobayashi et al would increase the quality of the video and audio signals.

Increasing the quality of the video and audio signals would has been an adequate motivation within 35 U.S.C. 103.

Not only the specific teachings of a reference but also reasonable inferences which the artisan would have logically drawn therefrom may be properly evaluated in formulating a rejection. In re Preda, 401 F.2d 825, 159 USPQ 342 (CCPA 1968) and In re Shepard, 319 F.2d 194, 138 USPQ 148 (CCPA 1963). Furthermore, artisans must be presumed to know something about the art apart from what the references disclose. In re Jacoby, 309 F.2d 513, 135 USPQ 317 (CCPA 1962). Every reference relies to some extent on knowledge of persons skilled in the art to complement that which is disclosed therein. In re Bode, 550 F.2d 656, 193 USPQ 12 (CCPA 1977).

Finally, the expect benefits from applying special effects to the video and audio signals disclosed in col. 3, lines 56-65 of Kobayashi et al would themselves have been evidence of obviousness. Expected beneficial results are themselves evidence of obviousness. In re Hoffman, 556 F.2d 539, 194 USPQ 126 (CCPA 1977), In re Skoll, 523 F.2d 1392, 187 USPQ 481 (CCPA 1975); and In re Skoner, 517 F.2d 947, 186 USPQ 80 (CCPA 1975).

In re page 16, applicant states that claims 2, 6-7, 30, and 34-35 are dependent upon claims 1 and 29, respectively and applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. 103(a).

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In response, as discussed above with respect to claims 1 and 29, the combination of the applied references discloses all the claimed limitations.

In re pages 16-17, applicant states that claims 3, 5, 31, and 33 are dependent upon claims 1 and 29 and are deemed moot in view of applicant's comments concerning claims 1 and 29 above.

In response, as discussed above with respect to claims 1 and 29, the combination of the applied references discloses all the claimed limitations.

In re page 17, applicant states that claims 4 and 32 are dependent upon claims 1 and 29 and are deemed moot in view of applicant's comments concerning claims 1 and 29 above.

In response, as discussed above with respect to claims 1 and 29, the combination of the applied references discloses all the claimed limitations.

2. Applicant's arguments with respect to claims 8-28 and 36-58 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-9, 13-15, 19-21, 23, 28, 36-37, 41-43, 47-49, 51, and 56-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al (Re. 36,801) in view of Abecassis (US 6,504, 990 B1).

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Regarding claim 20, Logan et al, as discussed in the last Office Action, discloses a process for a digital video recorder (Fig. 1), comprising the steps of:

storing a plurality of multimedia programs in digital form on a storage device (col. 3, lines 4-17);

playing back at least two of said multimedia programs from said storage device to at least one television monitor (col. 3, lines 4-17); and

wherein said playing back step allows playback rate and direction of each multimedia program to be controlled individually to perform variable rate fast forward and rewind, frame step, pause, and play functions (col. 3, line 63 to col. 4, line 5).

However, Logan et al does not specifically discloses the newly added limitations "displaying a list of pre-recorded multimedia programs stored on said storage device to a user", "wherein the user selects multimedia programs from said list", and "simultaneously playing back at least tow of said selected multimedia programs from said storage device or at least one of said selected multimedia programs and a multimedia program whose storage is in progress to at least one television monitor".

Abecassis teaches an apparatus for randomly and continuously playing fragments of a video segment having "means for displaying a list of pre-recorded multimedia programs stored on said storage device to a user (Figs. 77D-7G, col. 25, line 47 to col. 27, line 40)", "wherein the user selects multimedia programs from said list (Figs. 77D-7G, col. 25, line 47 to col. 27, line 40)", and "means for simultaneously playing back at least tow of said selected multimedia programs from said storage device or at least one of said selected multimedia programs and a multimedia program whose

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storage is in progress to at least one television monitor (col. 31, lines 39-58 and col. 67, lines 37-62)” to customize the playing of videos to satisfy the particular video requirement of each of a plurality of viewer and to deliver to each viewer a more enjoyable video experience without requiring the level of active participation inherent in interactive systems, the use of personal computers, and/or by primitive consumer electronic products (col. 1, lines 46-57).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the capability of randomly and continuously playing fragments of a video segment as taught by Abecassis into Logan et al's system in order to simplify the process of playing back the desired video signal recorded on the recording medium.

Regarding claim 21, Logan et al further discloses the claimed wherein said playing back step converts said at least two of said multimedia programs into television output signals (col. 3, lines 4-17).

Regarding claim 23, Logan et al discloses the claimed wherein a user controls the playback rate and direction of a multimedia program through a remote control (col. 3, lines 18-26).

Regarding claim 28, Logan et al discloses the claimed wherein an input signal tuner receives any of: software updates or data (col. 3, lines 4-17).

Apparatus claim 48 is rejected for the same reasons as discussed in method claim 20 above.

Apparatus claim 49 is rejected for the same reasons as discussed in method claim 21 above.

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Apparatus claim 51 is rejected for the same reasons as discussed in method claim 23 above.

Apparatus claim 56 is rejected for the same reasons as discussed in method claim 28 above.

Regarding claim 8, as discussed above with respect to claim 20, the combination of Logan et al and Abecassis discloses all the features of the claimed invention including the claimed plurality of output devices (col. 12, lines 6-16 of Abecassis) and the newly added limitation "wherein at least tow output devices simultaneously extract different digital broadcast signals" (col. 31, lines 39-58 and col. 67, lines 37-62).

Regarding claim 9, Logan et al discloses the claimed wherein a user controls the playback rate and direction of a multimedia program through a remote control (col. 3, lines 18-26).

Regarding claim 13, Logan et al discloses the claimed wherein an input signal tuner receives any of: software updates or data (col. 3, lines 4-17).

Claim 14 is rejected for the same reasons as discussed in claim 8 above.

Claim 15 is rejected for the same reasons as discussed in claim 9 above.

Claim 19 is rejected for the same reasons as discussed in claim 13 above.

Apparatus claim 36 is rejected for the same reasons as discussed in method claim 8 above.

Apparatus claim 37 is rejected for the same reasons as discussed in method claim 9 above.

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Apparatus claim 41 is rejected for the same reasons as discussed in method claim 13 above.

Apparatus claim 42 is rejected for the same reasons as discussed in method claim 8 above.

Apparatus claim 43 is rejected for the same reasons as discussed in method claim 9 above.

Apparatus claim 47 is rejected for the same reasons as discussed in method claim 8 above.

Regarding claim 57, Abecassis further discloses the newly added limitation wherein said playing back step plays back said at least two of said multimedia programs in a picture in a picture format to a television monitor (col. 67, lines 37-62).

Claim 58 is rejected for the same reasons as discussed in claim 57 above.

5. Claims 11, 17, 22, 39, 45, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al (Re. 36,801) in view of Abecassis (US 6,504,990 B1) as applied to claims 8, 14, 21, 36, 42, and 49 above, and further in view of Mankovitz et al ('195 B1).

Regarding claim 11, the combination of Logan et al and Abecassis discloses all the features of the instant invention as discussed in claim 8 above except for providing inserting on-screen displays into a television output signal.

Mankovitz et al teaches that on-screen television guides can be used to select programs for viewing or recording (col. 1, lines 16-35).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known on-screen television guides as taught by Mankovitz et al into Logan et al's system in order to select programs for recording in unattended recording mode.

Claim 17 is rejected for the same reasons as discussed in claim 11 above.

Claim 22 is rejected for the same reasons as discussed in claim 11 above.

Apparatus claim 39 is rejected for the same reasons as discussed in method claim 11 above.

Apparatus claim 45 is rejected for the same reasons as discussed in method claim 11 above.

Apparatus claim 50 is rejected for the same reasons as discussed in method claim 22 above.

6. Claims 10, 12, 16, 18, 24-25, 38, 40, 44, 46, and 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al (Re. 36,801) in view of Abecassis (US 6,504,990 B1) as applied to claims 8, 14, 20, 36, 42, and 48 above, and further in view of Fujita et al ('619 B1).

Regarding claim 10, the combination of Logan et al and Abecassis discloses all the features of the instant invention as discussed in claim 8 above except for providing a multimedia recording device, wherein said converting step sends any of a specific digital broadcast signal or a television output signal to said multimedia recording device for recording.

Fujita et al teaches an image editing system having hard disk for storing the editing video signal (col. 2, lines 59-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the editing system as taught by Fujita et al into Logan et al's system in order to increase the quality of the video signal by editing the video signal.

Regarding claim 12, Fujita et al also discloses the step of providing editing means for creating custom sequences of video and/or audio output (col. 2, lines 59-65); and wherein said editing means allows any number of video and/or audio segments of digital broadcast signals to be lined up and combined and stored on said storage device (col. 2, lines 59-65 and Fig. 4).

Claim 16 is rejected for the same reasons as discussed in claim 10 above.

Claim 18 is rejected for the same reasons as discussed in claim 12 above.

Regarding claim 24, the combination of Logan et al and Abecassis discloses all the features of the instant invention as discussed in claim 20 above except for providing a multimedia recording device, wherein said playing back step sends a multimedia program to said multimedia recording device, allowing a user to record said multimedia program.

Fujita et al teaches an image editing system having hard disk for storing the editing video signal (col. 2, lines 59-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the editing system as taught by Fujita et al into Logan et al's system in order to increase the quality of the video signal by editing the video signal.

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Regarding claim 25, Fujita et al also discloses the step of providing editing means for creating custom sequences of video and/or audio output (col. 2, lines 59-65); and wherein said editing means allows any number of video and/or audio segments of multimedia programs to be lined up and combined and stored on said storage device (col. 2, lines 59-65 and Fig. 4).

Apparatus claim 38 is rejected for the same reasons as discussed in method claim 10 above.

Apparatus claim 40 is rejected for the same reasons as discussed in method claim 12 above.

Apparatus claim 44 is rejected for the same reasons as discussed in method claim 10 above.

Apparatus claim 46 is rejected for the same reasons as discussed in method claim 12 above.

Apparatus claims 52-53 are rejected for the same reasons as discussed in method claims 24-25.

7. Claims 26-27 and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al (Re. 36,801) in view of Abecassis (US 6,504,990 B1) as applied to claims 20 and 48 above, and further in view of Kobayashi et al ('254).

Regarding claim 26, the combination of Logan et al and Abecassis discloses all the features of the instant invention as discussed in claim 20 above except for providing wherein said storing step separates a digitized analog multimedia program or digital

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multimedia program into its video and audio components before storing on said storage device.

Kobayashi et al teaches a digital video audio processing apparatus having means for separating the digital multimedia program into its video and audio components so that the video and audio signals can be processed separately from the serial digital video signal in which audio signal is mixed (col. 3, lines 49-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the switching system as taught by Kobayashi et al into Logan et al's system in order to increase the quality of the video signal by processing the video and audio signals separately.

Regarding claim 27, Kobayashi et al also discloses the claimed providing means for synchronizing video and audio components for proper playback (col. 3, line 66 to col. 4, line 7).

Apparatus claims 54-55 are rejected for the same reasons as discussed in method claims 26-27 above.

8. Claims 1-2, 6-7, 29-30, and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al (Re. 36,801) in view of Kobayashi et al ('254) and further in view Yasukohchi et al ('837 B1) as set forth in the last Office Action.

Regarding claim 1, Logan et al discloses all the features of the claimed invention as discussed in claim 20 above except for providing separating a digital signal for digital television broadcast signal into its video and audio components and providing a plurality of output devices.

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Kobayashi et al teaches a digital video audio processing apparatus having means for separating the digital multimedia program into its video and audio components so that the video and audio signals can be processed separately from the serial digital video signal in which audio signal is mixed (col. 3, lines 49-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the switching system as taught by Kobayashi et al into Logan et al's system in order to increase the quality of the video signal by processing the video and audio signals separately.

The combination of Logan et al and Yasukohchi et al does not specifically disclose providing a plurality of output devices.

Yasukohchi et al teaches a multichannel recording and reproducing apparatus having a plurality of output devices (102 of Fig. 1) for allowing plurality of users to access the video signal recorded on the disc unit (col. 5, lines 10-27).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the capability of recording and reproducing multichannel video signal as taught by Yasukohchi et al into Logan et al's system in order to increase the flexibility of the system of Logan et al by allowing plurality of users to access video signal recorded on the disc unit.

Regarding claim 2, Logan et al discloses the claimed wherein a user controls the playback rate and direction of a multimedia program through a remote control (col. 3, lines 18-26).

Regarding claim 6, Kobayashi et al also discloses the claimed providing means for synchronizing video and audio components for proper playback (col. 3, line 66 to col. 4, line 7).

Regarding claim 7, Logan et al discloses the claimed wherein an input signal tuner receives any of: software updates or data (col. 3, lines 4-17).

Apparatus claims 29-30 and 34-35 are rejected for the same reasons as discussed in method claims 1-2 and 6-7 above.

9. Claims 3, 5, 31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al (Re. 36,801) in view of Kobayashi et al ('254) and Yasukohchi et al ('837 B1) as applied to claims 1 and 29 above, and further in view of Fujita et al ('619 B1).

Regarding claim 3, the combination of Logan et al, Kobayashi et al, and Yasukohchi et al discloses all the features of the instant invention as discussed in claim 1 above except for providing a multimedia recording device, wherein said decoding step sends any of a specific video and audio component or a television output signal to said multimedia recording device for recording.

Fujita et al teaches an image editing system having hard disk for storing the editing video signal (col. 2, lines 59-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the editing system as taught by Fujita et al into Logan et al's system in order to increase the quality of the video signal by editing the video signal.

Regarding claim 5, Fujita et al also discloses the step of providing editing means for creating custom sequences of video and/or audio output (col. 2, lines 59-65); and wherein said editing means allows any number of video and/or audio segments to be lined up and combined and stored on said storage device (col. 2, lines 59-65 and Fig. 4).

Apparatus claim 31 is rejected for the same reasons as discussed in method claim 3 above.

Apparatus claim 33 is rejected for the same reasons as discussed in method claim 5 above.

10. Claims 4 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al (Re. 36,801) in view of Kobayashi et al ('254) and Yasukohchi et al ('837 B1) as applied to claims 1 and 29 above, and further in view of Mankovitz et al ('195 B1).

Regarding claim 4, the combination of Logan et al, Kobayashi et al, and Yasukohchi et al discloses all the features of the instant invention as discussed in claim 1 above except for providing inserting on-screen displays into a television output signal.

Mankovitz et al teaches that on-screen television guides can be used to select programs for viewing or recording (col. 1, lines 16-35).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known on-screen television guides as taught by Mankovitz et al into Logan et al's system in order to select programs for recording in unattended recording mode.

Apparatus claim 32 is rejected for the same reasons as discussed in method claim 4 above.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

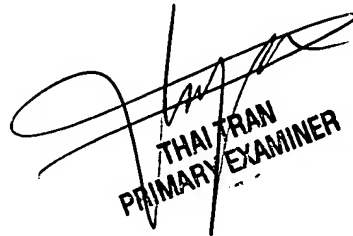
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (703) 305-4725. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

TTQ
April 2, 2003



THAI TRAN
PRIMARY EXAMINER